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a second set of signal processing equipment comprising:

means for receiving program signals with digitized programs; and

means for processing one or more of the digitized programs into a second processed signal;

means, connected to the first set of signal processing equipment and the second set of signal processing equipment, for adding the first processed signal to the second processed signal to produce an added signal containing more programs than either processed signal; and

means for distributing the added signal to a plurality of set top terminals.

Please add the following claims:

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37. (New) The modular cable headend of claim 33 wherein the means for processing one or more of the digitized programs divides the program signals into priority levels, each priority level containing one or more of the digitized programs, and wherein the means for distributing distributes the added signal to one or more of the plurality of set top terminals using the priority levels of the digitized programs contained in the added signal.

38. (New) The modular cable headend of claim 37 wherein the means for receiving program signals with digitized programs includes means for obtaining transponded signals from groups of satellite transponders and wherein the priority levels that the digitized programs are divided into is determined by the group of transponders from which each program signal is obtained.

39. (New) The modular cable headend of claim 37 wherein the means for processing the digitized programs into a second processed signal comprises:

a means for selecting digitized programs from the program signals based on the priority level of the digitized programs; and

a means, connected to the selecting means, for combining the selected digitized programs into the second processed signal.

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40. (New) The modular cable headend of claim 37 wherein the program signals with digitized programs have headers and the priority levels of the digitized programs are divided into is indicated by the headers.

41. (New) The modular cable headend of claim 37 wherein the program signals with digitized programs include different types of programming and the priority levels of the digitized programs are determined by the type of programming of each digitized program.

42. (New) The modular cable headend of claim 37 wherein the priority levels of the digitized programs includes one or more of the following: priority level one, priority level two, or priority level three.

43. (New) The modular cable headend of claim 42 wherein the program signals with digitized programs include different types of programming, including most profitable or most watched programming, and wherein priority level one includes the most profitable or the most watched programming.

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44. (New) A method for distributing program signals received in a cable headend comprising the steps of:

receiving a plurality of program signals, wherein the program signals contain channels or programs;

processing the program signals, wherein the processing step comprises the steps of:

dividing the program signals into priority levels, wherein each priority level contains one or more channels or programs;

selecting channels or programs based on the priority levels of the channels or programs; and

combining the selected channels or programs into a processed program signal; and distributing the processed program signal to a plurality of set top terminals.

45. (New) The method of claim 44 wherein the program signals includes headers that define the priority level of the channels or programs in the program signals, and wherein the step of dividing the program signals includes the step of:

reading the headers of the program signals to determine the priority level of the channels or programs.

46. (New) The method of claims 44 wherein each of the program signals are received from one of a plurality of groups of transponders, and wherein the step of dividing the program signals includes the step of:

determining from which group of transponders each of the program signals was received.

47. (New) A system for cherry-picking desired digital programs or channels from one or more multiplexed signals comprising:

a CPU, wherein the CPU manages, monitors, ensures that the desired digital programs or channels are selected, and sends instructions;

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a demultiplexer, wherein the demultiplexer receives the signals, performs selection of the desired programs or channels according to instructions sent from the CPU, and outputs the selected programs or channels;

a combiner, wherein the combiner accepts the outputted selected programs or channels from the demultiplexer and combines the selected programs or channels into a combined signal for transmission according to instructions sent from the CPU; and

wherein the CPU manages and monitors the demultiplexer and the combiner.

48. (New) The system of claim 47, wherein the demultiplexer separates the multiplexed signals into individual digital programs or channels.

49. (New) The system of claim 47 further comprising a local insertion device, wherein the local insertion device receives one or more local programs and outputs one or more local programs to the combiner, and wherein the combiner combines the output local programs with the selected programs or channels.

50. (New) The system of claim 47 wherein the CPU is instructed from a remote site using modem communication.

51. (New) The system of claim 47 wherein one or more analog program signals are received, the system further comprising:

a digital encoder, wherein the digital encoder digitizes the received one or more analog signals and outputs the digitized signals to the combiner, wherein the combiner combines the digitized signals with the selected programs or channels.

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52. (New) The system of claim 47 wherein the received signals are encrypted, the system further comprising:

decryption equipment, connected to the demultiplexer, wherein the decryption equipment removes encryption.

53. (New) The system of claim 47 further comprising:

encryption equipment, connected to the combiner, wherein the encryption equipment adds encryption.

54. (New) The system of claim 47 further comprising:

error correction equipment, connected to the demultiplexer, wherein the error correction equipment performs error correction.

55. (New) The system of claim 47 further comprising:

a receiver; and

a modulator, wherein the modulator modulates the combined signal for transmission.

56. (New) The system of claim 47 wherein the instructions comprise control signals.

57. (New) A system for cherry-picking desired digital programs or channels from one or more multiplexed signals comprising:

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a CPU, wherein the CPU manages, monitors, ensures that the desired digital programs or channels are selected, and sends instructions;

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a digital logic component, wherein the digital logic component selects the desired digital programs or channels according to instructions sent by the CPU and outputs the selected digital programs or channels;

a serializer, wherein the serializer combines the selected programs or channels into a signal for transmission according to instructions sent by the CPU; and

wherein the CPU manages and monitors the digital logic component and the serializer.

58. (New) The system of claim 57 further comprising:

a demultiplexer, wherein the demultiplexer separates the multiplexed signals into individual digital programs or channels.

59. (New) The system of claim 57 further comprising a local insertion device, wherein the local insertion device receives one or more local programs and outputs one or more local programs to the serializer, and wherein the serializer combines the output local programs with the selected programs or channels.

60. (New) The system of claim 57 wherein the CPU is instructed from a remote site using modem communication.

61. (New) The system of claim 57 wherein one or more analog program signals are received, the system further comprising:

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a digital encoder, wherein the digital encoder digitizes the received one or more analog signals and outputs the digitized signals to the serializer, wherein the serializer combines the digitized signals with the selected programs or channels.

62. (New) The system of claim 57 wherein the received signals are encrypted, the system further comprising:

decryption equipment, connected to the digital logic component, wherein the decryption equipment removes encryption.

63. (New) The system of claim 57 further comprising:

encryption equipment, connected to the serializer, wherein the encryption equipment adds encryption.

64. (New) The system of claim 57 further comprising:

error correction equipment, connected to the digital logic component, wherein the error correction equipment performs error correction.

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65. (New) The system of claim 57 further comprising:
a receiver; and
a modulator, wherein the modulator modulates the combined signal for transmission.

66. (New) The system of claim 57 wherein the instructions comprise control signals.

67. (New) A method for cherry-picking desired digital programs or channels from one or more multiplexed signals comprising the steps of:

receiving information and one or more multiplexed signals containing a plurality of digital programs or channels, wherein the information includes data on identities of the desired digital programs or channels;

generating instructions regarding the desired digital programs or channels, wherein the instructions are generated using the received information;

selecting the desired digital programs or channels using the generated instructions, wherein the selected digital programs or channels are a subset of the plurality of digital programs or channels contained in the multiplexed signals; and

combining the selected digital programs or channels into a combined signal for transmission.

68. (New) The method of claim 67, further comprising the step of demultiplexing the multiplexed signals into individual digital programs or channels.

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inserting one or more local programs, wherein the local programs are combined with the selected digital programs or channels in the combining step.

70. (New) A method for filtering unwanted digital programs or channels from one or more multiplexed signals, comprising the steps of:

receiving information and one or more multiplexed signals containing a plurality of digital programs or channels, wherein the information includes data on identities of the digital programs or channels;

generating instructions regarding the digital programs or channels, wherein the instructions are based on the received information;

removing unwanted digital programs or channels using the generated instructions, wherein the unwanted digital programs or channels are a subset of the plurality of digital programs or channels contained in the multiplexed signals and whereby removing the unwanted digital programs or channels leaves the remaining plurality of digital programs or channels contained in the multiplexed signals; and

combining the remaining plurality of digital programs or channels into a combined signal for transmission.

71. (New) The method of claim 70, further comprising the step of demultiplexing the multiplexed signals into individual digital programs or channels.